MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2017/2018

PEM0024 – ESSENTIALS OF MICROECONOMICS

(All sections / Groups)

12 OCTOBER 2017
9.00 a.m – 11.00 a.m
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of **SEVENTEEN (17)** printed pages (including the cover page) with:
   Section A: FORTY (40) multiple-choice questions (40 Marks).
   Section B: THREE (3) structured questions (60 Marks).

2. Attempt **ALL** of the questions. The distribution of marks is shown for each section and each sub-question in Section B.

3. Please shade all your answers of Section A in the multiple-choice answer sheet, and write the answers of Section B in the Answer Booklet provided.

SECTION A (40 MARKS)

1. Which of the following is the best definition of economics?
   (a) The study of how individuals, business, government, and entire society choose to use the scarce resources in order to satisfy unlimited wants.
   (b) The study of how consumers spend their income.
   (c) The study of how business firms decide what inputs to hire and what outputs to produce.
   (d) The study of how the federal government allocates tax dollars.

2. If employers provide better employee benefits, this increases the incentive of some individuals to work. This statement is best described as
   (a) a positive statement.
   (b) an example of the *ceteris paribus* assumption.
   (c) a normative statement.
   (d) a comparative economics statement.

3. Production inefficiency occurs
   (a) only when an economy produces underneath its production possibility frontier.
   (b) only when an economy produces at the wrong point on the production possibility frontier.
   (c) either when an economy produces underneath the production possibility frontier or when the economy is producing the wrong combination of goods on the production possibility frontier.
   (d) only when the economy produces outside the production possibility frontier.

4. Which of the following is held constant along the demand curve?
   (a) Price of the good.
   (b) Quantity.
   (c) Income.
   (d) Both (a) and (b).

5. According to the law of _____, there is a positive relationship between price and _____.
   (a) supply; the change in supply
   (b) supply; the quantity supplied
   (c) demand; quantity demanded
   (d) demand; change in demand

Continued...

6. When the supply of chocolate decreases while the demand for chocolate also decreases, the equilibrium _____ of chocolate will definitely _____, *ceteris paribus*.
   (a) price; increase
   (b) price; decrease
   (c) quantity; increase
   (d) quantity; decrease

Refer to the information provided in Table 1 to answer Question 7.

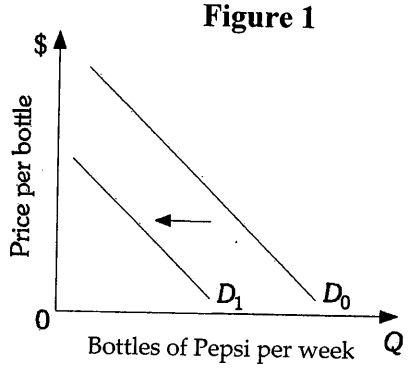
Table 1

Price per Pizza ($)	Quantity Demanded (Pizzas per Month)	Quantity Supplied (Pizzas per Month)
3	1,200	600
6	1,000	700
9	800	800
12	600	900
15	400	1,000

7. Refer to **Table 1**. This market will be in equilibrium if the price per pizza is
   (a) $6.
   (b) $9.
   (c) $12.
   (d) $15.

Refer to the information provided in Figure 1 below to answer Question 8.

Figure 1



8. Refer to **Figure 1**. Which of the following would be most likely to cause the demand for Pepsi to shift from D_0 to D_1?
   (a) A decrease in income, assuming that Dr. Pepper is a normal good.
   (b) An increase in the price of 7-UP, assuming 7-UP is a substitute for Dr. Pepper.
   (c) A decrease in the price of Dr. Pepper.
   (d) A reduction in the price of sugar used to make Dr. Pepper.

Continued...

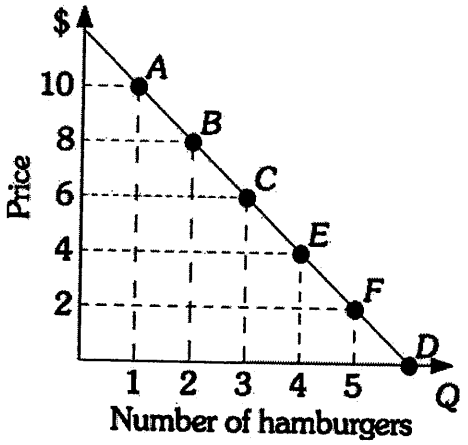
9. A change in income leads to a _____ that causes a _____.
   (a) change in demand; movement along the demand curve
   (b) change in quantity demanded; movement along the demand curve
   (c) change in demand; shift of the demand curve
   (d) change in quantity demanded; shift of the demand curve

10. The price elasticity of demand for durian in Selangor is -2, and the price elasticity of demand for durian in Johor is -0.5. In other words, demand in Selangor is _____, and demand in Johor is _____.
   (a) elastic; inelastic
   (b) inelastic; elastic
   (c) elastic; unit elastic
   (d) inelastic; unit inelastic

11. A perfectly price inelastic demand curve will be a _____ line.
   (a) horizontal
   (b) vertical
   (c) positively sloped
   (d) negatively sloped

Refer to the information provided in Figure 2 below to answer Question 12.

Figure 2



12. Refer to **Figure 2**. If the price of a hamburger increases from $8 to $10, the price elasticity of demand equals _____. Use the midpoint formula.
   (a) -0.33
   (b) -3.0
   (c) -30
   (d) -300

Continued...

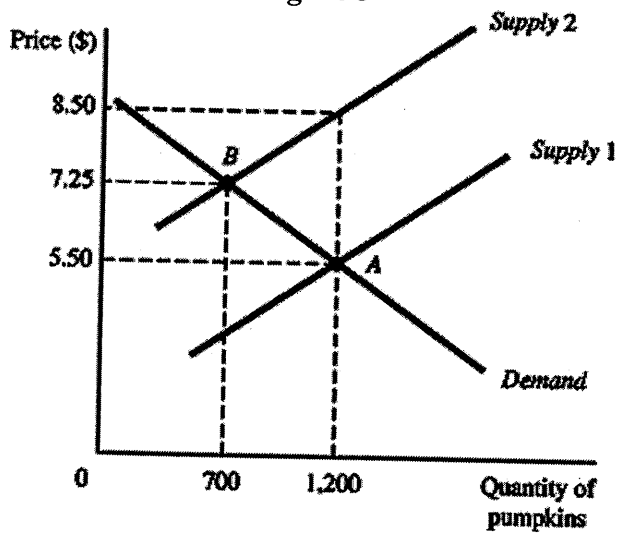
13. The less time that elapses, the
    (a) less price elastic is the demand for the product.
    (b) more price elastic is the demand for the product.
    (c) greater the income elasticity of demand for a product.
    (d) smaller the income elasticity of demand for the product.

14. The income elasticity of demand for low-quality beef is -2. Thus, an 8% decrease in the quantity of low-quality beef demanded
    (a) is the result of a decrease in income of 4%.
    (b) is the result of an increase in income of 0.25%.
    (c) is the result of an increase in income of 4%.
    (d) is unrelated to any change in income.

Refer to the information provided in Figure 3 below to answer Question 15 and 16.

Figure 3 represents the market for pumpkins both before and after the imposition of an excise tax, which is represented by the shift of the supply curve.

Figure 3



15. Refer to **Figure 3**, The amount the store owners will receive per pumpkin after paying the tax is
    (a) $1.75.
    (b) $3.00.
    (c) $4.25.
    (d) $7.25.

Continued...

16. Refer to **Figure 3**. The amount customers will pay per pumpkin after the imposition of the tax is
    (a) $1.75.
    (b) $3.00.
    (c) $4.25.
    (d) $7.25.

17. Total utility is
    (a) the total amount of satisfaction yielded by the consumption of a good or service.
    (b) the additional satisfaction gained by consuming one more unit of something.
    (c) used to compare different people's likes and dislikes.
    (d) relatively easy to measure.

18. Ricardo eats 20 pieces of sushi on a Friday night. When he eats the 21st piece, he starts to feel nauseous and realises he probably should not have eaten the last piece. This suggests that for Ricardo the
    (a) marginal utility of the 21st piece of sushi is positive and increasing.
    (b) marginal utility of the 21st piece of sushi is negative.
    (c) total utility of pieces of sushi is increasing.
    (d) total utility of pieces of sushi is increasing by larger and larger increments.

19. Richard is consuming X and Y so that he is spending his entire income and $MU_X/P_X = 6$ and $MU_Y/P_Y = 10$. To maximize utility, he should
    (a) continue to consume the same amount of X and *Y* since he is already maximising utility.
    (b) consume less of both X and *Y*.
    (c) consume more X and less *Y*.
    (d) consume less X and more *Y*.

20. Adriana is maximising her utility. Her $MU_X/P_X = 10$ and $MU_Y = 60$. Then the price of Y must be
    (a) $1.
    (b) $6.
    (c) $10.
    (d) $60.

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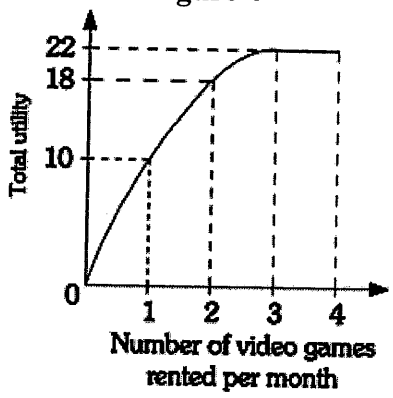
Refer to the information provided in Figure 4 below to answer Question 20 to 22 below.

Figure 4



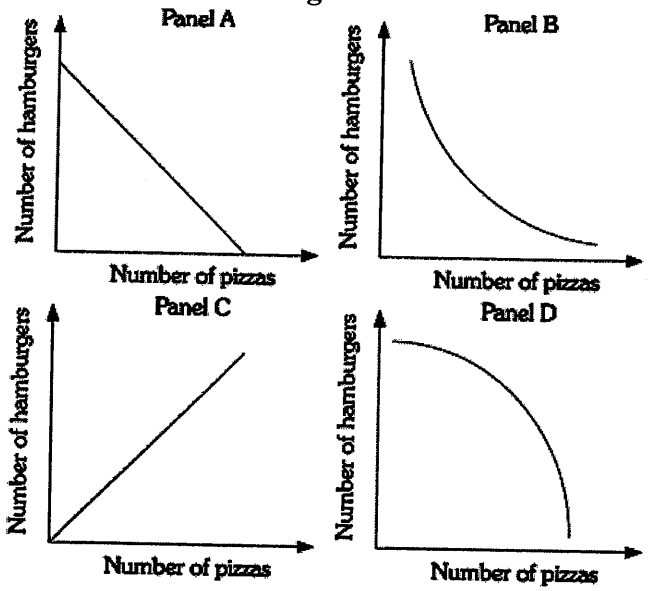
21. Refer to **Figure 4**. The marginal utility of the second video game rental is
    (a) 8.
    (b) 10.
    (c) 25.
    (d) 40.

22. Refer to **Figure 4**. The total utility of four video game rentals is
    (a) 0.
    (b) 4.
    (c) 8.
    (d) 22.

Continued...

Refer to the information provided in Figure 5 below to answer Question 23 below.

Figure 5



23. Refer to **Figure 5**. Assume Ellen has two products available, pizza and hamburgers. Ellen is always willing to trade one pizza for one hamburger regardless of how many pizzas and hamburgers she has. The curve in Panel _____ represents her indifference curve.
    (a) A
    (b) B
    (c) C
    (d) D

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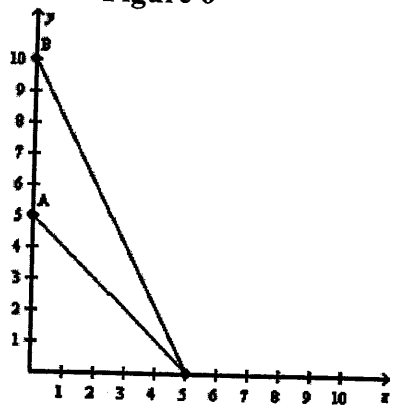
Refer to the information provided in Figure 6 below to answer Question 24.

Figure 6



24. **Figure 6** shows two budget lines: A and B. Which of the following could explain the change in the budget line from A to B?
    (a) A decrease in the price of X.
    (b) An increase in the price of Y.
    (c) A decrease in the price of Y.
    (d) More than one of the above could explain this change.

25. For normal goods
    (a) the substitution and income effects of a price decrease will both decrease the quantity of the good demanded.
    (b) the substitution and income effects of a price decrease will both increase the quantity of the good demanded.
    (c) the substitution effect of a price decrease will increase the quantity of the good demanded while the income effect of a price decrease will decrease the quantity of the good demanded.
    (d) the substitution effect of a price decrease will decrease the quantity of the good demanded while the income effect of a price decrease will increase the quantity of the good demanded.

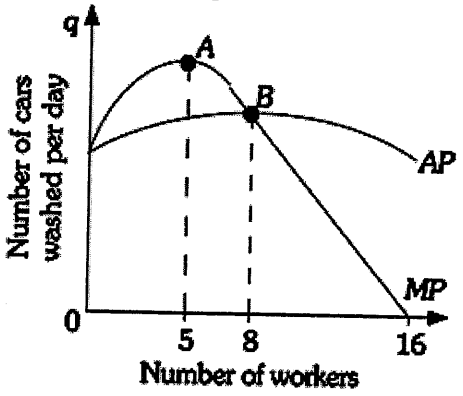
26. Suppose a consumer consumes two goods, X and Y. The relative price of the two goods equals the
    (a) marginal rate of substitution.
    (b) rate at which the consumer will give up X to gain Y while maintaining the same level of utility.
    (c) slope of the budget constraint.
    (d) All of the above are correct.

Continued...

27. Which type of cost does not depend on a firm's output?
    (a) Fixed cost
    (b) Variable cost
    (c) Total cost
    (d) Marginal cost

Refer to the information provided in Figure 7 below to answer Question 28 below.

Figure 7



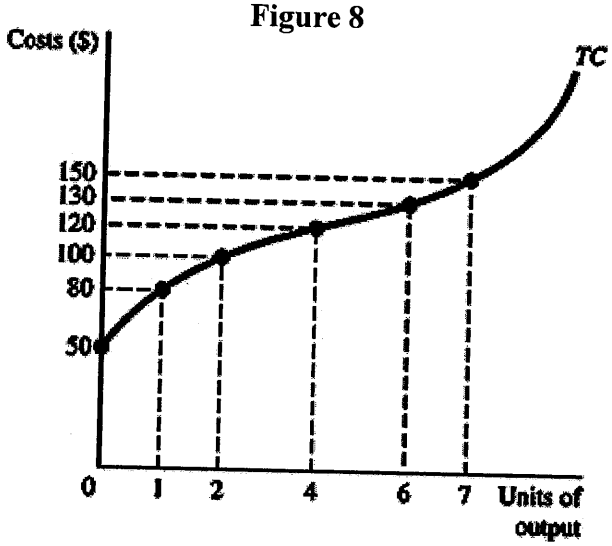
28. Refer to **Figure 7**. Diminishing marginal returns set in after the _____ worker is hired.
    (a) first
    (b) fifth
    (c) eighth
    (d) sixteenth

29. Total variable cost _____ as output increases, and total fixed cost _____ as output increases.
    (a) increases; increases
    (b) increases; decreases
    (c) increases; does not change
    (d) does not change; does not change

Continued...

Refer to the short-run information provided in Figure 8 below to answer Questions 30 to 31 below.

Figure 8



30. Refer to **Figure 8**. The total fixed costs for Blackstar Drones are
    (a) $0.
    (b) $50.
    (c) $150.
    (d) indeterminate from this information.

31. Refer to **Figure 8**. If two drones are produced, total variable costs are
    (a) $25.
    (b) $30.
    (c) $50.
    (d) $80.

32. Profit-maximizing firms want to maximize the difference between
    (a) total revenue and marginal cost.
    (b) total revenue and total cost.
    (c) marginal revenue and marginal cost.
    (d) marginal revenue and average cost.

33. In the short run
    (a) all firms that earn a loss will shut down.
    (b) if current firms are earning a profit, new firms will enter the industry.
    (c) firms act to minimize losses or maximize profits.
    (d) All of the above are correct.

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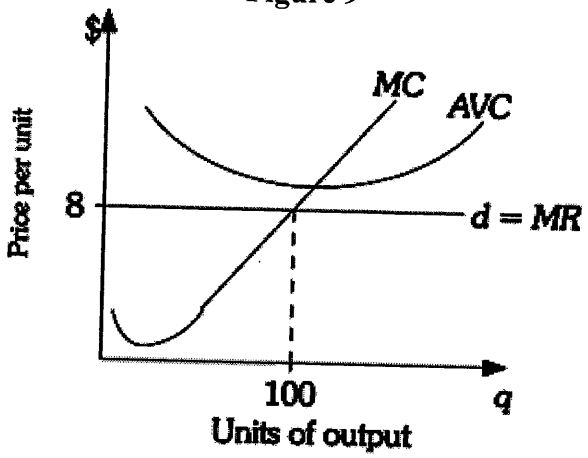
Refer to the information provided in Figure 9 below to answer Question 34.

Figure 9



34. Refer to **Figure 9**. In the short run this firm should _____ and in the long run this firm should _____, if economic conditions do not change.
    (a) shut down; exit the industry
    (b) exit the industry; shut down
    (c) continue to produce where *MC* = *MR*; expand
    (d) continue to produce where *MC* = *MR*; shut down

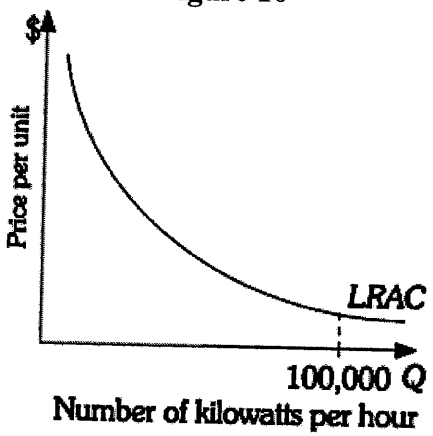
35. A monopoly is an industry with a single firm which produces
    (a) a standardized product.
    (b) a product for which there are a few close substitutes.
    (c) a product for which there are many close substitutes.
    (d) a product for which there are no close substitutes.

36. In the short run, a monopoly
    (a) will usually earn zero economic profits.
    (b) may earn positive economic profits due to entry barriers.
    (c) will often suffer economic losses.
    (d) results in an efficient outcome.

Continued...

Refer to the information provided in Figure 10 below to answer Question 37.

Figure 10



37. Refer to **Figure 10**. The only firm producing electricity has the long-run average total cost curve shown. The total amount of demand for kilowatts is 100,000 per hour. It makes economic sense for this firm to be the only producer of electricity because this firm
    (a) must be realizing economies of scale in producing electricity.
    (b) must have a patent on the production process necessary to produce electricity.
    (c) must have control over a scarce factor of production.
    (d) must have a government franchise to produce electricity.

38. Monopolistic competition is an industry market structure with
    (a) a single firm in which the entry of new firms is blocked.
    (b) a small number of firms each large enough to impact the market price of its output.
    (c) many firms each able to differentiate their product.
    (d) many firms each too small to impact the market price of its output.

39. Due to the demand curve which is kinked,
    (a) The marginal revenue curve has a gap.
    (b) The marginal revenue curve is a straight downward sloping line.
    (c) The marginal revenue curve is horizontal.
    (d) None of the above.

40. According to the Kinked Demand Curve Theory,
    (a) The portion of a firm's demand curve below current price is highly elastic.
    (b) The portion of a firm's demand curve above current price is highly elastic.
    (c) If a firm lowers its price, other firms will not follow suit.
    (d) If a firm raises its price, other firm will not follow suit.

Continued...

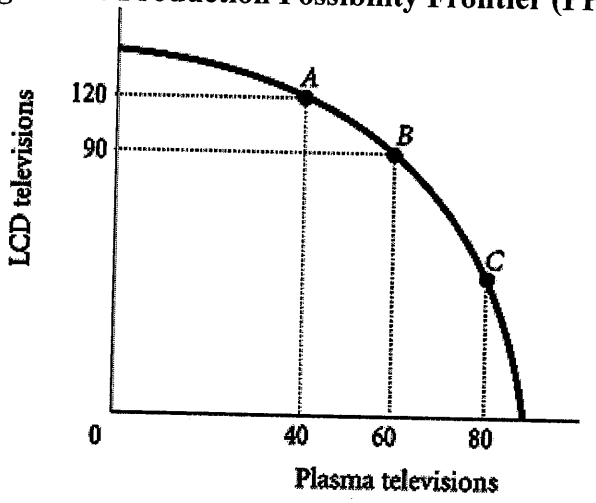
SECTION B: STRUCTURED QUESTIONS (60 MARKS)

Question One (20 Marks)

Refer to the information provided in the **Figure 11** below to answer the questions that follow.

The economy is currently at Point A on the Production Possibility Frontier (PPF) in **Figure 11**. Assume the economy produces LCD televisions and Plasma televisions.

Figure 11: Production Possibility Frontier (PPF)



(a) Calculate the opportunity cost of moving from Point *A* to Point *B*. Explain your answer.

(4 marks)

(b) Which combination below shows efficiency? Which combinations are attainable and which are unattainable? Briefly explain your answer.

(i) 90 LCD televisions and 90 plasma televisions. (2 marks)

(ii) 90 LCD televisions and zero plasma televisions. (2 marks)

(iii) 120 LCD televisions and 40 plasma televisions. (2 marks)

Continued...

(c) Fill in the missing amounts in **Table 2**. Show your calculations.

(6 marks)

Table 2

	% Change in Price	% Change in Quantity	Elasticity
Demand for the Apple iWatch	(i) (*2 marks*)	-25%	-1.0
Demand for roses on Valentine's Day	+50%	(ii) (*2 marks*)	-0.2
Demand for electronic cigarettes	-10%	+38%	(iii) (*2 marks*)

(d) Use your answers in the preceding problem in (c) to defend your answers to the following questions:

(i) Would you recommend that florists raise the prices for roses on Valentine's Day if their only goal is to increase Total Revenue?

(2 marks)

(ii) Would you recommend that electronic cigarette vendors cut prices to increase Total Revenue?

(2 marks)

Question Two (20 Marks)

(a) Explain if each of the following is a fixed cost or variable cost for the Toyota car company.

(i) The cost of aluminium used for its automobiles.

(2 marks)

(ii) The property taxes on its Toyota Camry factory.

(2 marks)

(iii) The cost of labour for its assembly line workers

(2 marks)

Continued...

(b) ***Refer to the information provided in Scenario 1 below to answer Question 2(b).***

Scenario 1: Jeremy worked at a bank with a monthly salary of RM1,500. He decided to quit his job and open a bookstore in his neighbourhood. He now pays RM500 in rent, RM80 in electricity and water, and RM120 in wages every month.

Suppose Jeremy sells 100 books at price of RM30 per book every month.

(i) What is the monthly total revenue of Jeremy's bookstore?

(4 marks)

(ii) How much accounting profit does Jeremy make a month?

(5 marks)

(iii) How much economic profit does Jeremy make a month?

(5 marks)

Question Three (20 Marks)

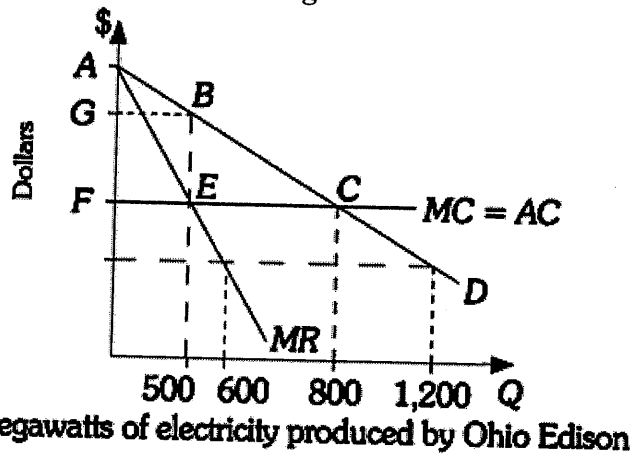
(a) List the **THREE (3)** barriers to entry that give rise to monopoly.

(9 marks)

Continued...

(b) Refer to the information provided in **Figure 12** below to answer the questions that follow.

Figure 12



(i) What is the profit-maximising-level of electricity production under a monopoly market structure?

(3 marks)

(ii) What is the area of consumer surplus, at the profit-maximising level of electricity production under monopoly for Ohio Edison, based on **Figure 12**?

(3 marks)

(iii) What is the area of **deadweight loss** if Ohio Edison is a profit-maximising monopolist?

(5 marks)

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